CLAIMS:

1. Computer graphics processor having a renderer for rendering in parallel N, 2D images of a 3D model,
said renderer comprising:
- a rasterizer (SS) for transversing a surface grid over a surface of primitives of said 3D images for all N views,
- a shader unit (PPS) for determining a color of the output of the rasteriser (SS) and forwarding a shaded color sample along with its screen coordinates, and
- N screen space resamplers (SSR) each for resampling the shaded color sample determined by said shader means (PPS) according to one of the N views.

2. Computer graphics processor according to claim 1, further comprising:
a texture memory (TM) for storing texture maps,
wherein said surface grid is derived from a texture map being associated with said primitive and being stored in said texture memory (TM).

3. Computer graphics processor according to claim 2,
wherein a grid associated to one of the texture maps stored in the texture memory (TM) is chosen as surface grid, if
said texture map is addressed independently.
said texture map is based on a 2D texture, and
the texture coordinates at the vertices do not make up a degenerate primitive.

4. Computer graphics processor according to claim 3, wherein
the texture map with the largest area in texture space is chosen, if more than one texture maps stored in said texture memory (TM) fulfill said three requirements a)-c).

5. Computer graphics processor according to claim 1 or 2, further comprising:
a means for addressing a display screen,

said renderer having an input for a 3D model and an input for at least one viewpoint for rendering image information for supplying to the addressing means,

wherein the renderer further comprises an initial part (70) having an input for the 3-D model and for at least one main view point for rendering objects in the form of at least one main view point Z-stack (91, 94) having stack layers (S1, S2, S3) with color information and Z-values,

the renderer further comprising

a Z-stack constructor in which, from the at least one main view point Z-stack (91,94) generated by the initial stage, Z-stacks (97) for additional viewpoints are constructed, and a further image information occlusion semantics stage for generating image information (79) from the z-stacks (97).

6. Computer graphics processor according to claim 5, wherein said renderer further comprises

an object extracter (95) for extraction of objects from a view point z-stack (91, 94).

7. Computer graphics processor according to claim 6, wherein the object extracter (95) is arranged for extracting objects from the at least one main point view z-stack (91, 94).

8. Computer graphics processor according to claim 5, wherein the renderer comprises a DOF rendering stage (92, 93),

wherein the DOF rendering stage is arranged for DOF processing of the at least one main point view z-stack (91) into a at least one main view point z-stack (94) comprising DOF blurring.

9. Method of rendering N views of 3D images, comprising the steps of:

- transversing a surface grid over a surface of primitives of said 3D images for all N views,
- determining a color of the output of the rasteriser (SSR) and forwarding a shaded color sample along with its screen coordinates, and
- resampling the shaded color sample determined by said shader means (PPS) for each of the N views.

10. Method of rendering N views of 3D images according to claim 9, further comprising the steps of:

storing texture maps a texture memory(TM),

wherein said surface grid is derived from a texture map being associated with said primitive and being stored in said texture memory (TM).

11. Method of rendering N views of 3D images according to claim 10,

wherein a grid associated to one of the texture maps stored in the texture memory (TM) is chosen as surface grid, if

said texture map is addressed independently.

said texture map is based on a 2D texture, and

the texture coordinates at the vertices do not make up a degenerate primitive.

12. Method of rendering N views of 3D images according to claim 11, wherein the texture map with the largest area in texture space is chosen, if more than one texture maps stored in said texture memory (TM) fulfill said three requirements a)-c).

13. Method of rendering N views of 3D images, further comprising the steps of: supplying data and addressing means of a 3D display device wherein for a main view point objects in the form of at least one main view point Z-stack (94) comprising stack layers (S1, S2, S3) are rendered with RGB and Z-values, and

construction from the at least one main view point Z-stack (94) z-stacks (97) for additional viewpoints, and

generating from the Z-stacks (97) for additional viewpoints by means of Z-tracing data (79) to be supplied to the addressing means

14. Computer program product comprising program code means stored on a computer readable medium for performing a method according to any one of claims 9 to 14, when said program is run on a computer.